



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/845,780	04/30/2001	Brian T. Murren	GE1-007US	4333
21718	7590	04/11/2007	EXAMINER	
LEE & HAYES PLLC SUITE 500 421 W RIVERSIDE SPOKANE, WA 99201			EL CHANTI, HUSSEIN A	
			ART UNIT	PAPER NUMBER
			2157	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		04/11/2007	ELECTRONIC	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Notice of this Office communication was sent electronically on the above-indicated "Notification Date" and has a shortened statutory period for reply of 3 MONTHS from 04/11/2007.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

lhpto@leehayes.com

Office Action Summary

Application No.

09/845,780

Applicant(s)

MURREN ET AL.

Examiner

Hussein A. El-chanti

Art Unit

2157

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-50 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-50 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. This action is responsive to RCE received on March 6, 2007. Claims 1, 9, 24, 27 and 29 were amended. Claims 1-50 are pending examination.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 9, 17 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 9, 17 and 27 state "one or more constraints that customize operation of the application". However the claim defines a multiple level constraint levels. It is unclear how "one constraint" can provide a first and second constraint layer to customize the operation of the application

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-44 are rejected under 35 U.S.C. 102(e) as being anticipated by Hasegawa et al., U.S. Patent No. 6,412,038 (referred to hereafter as Hasegawa).

As to claim 1, Hasegawa teaches a server system, comprising:

one or more computers (see 7 lines 42-50)

an application executing on the computers to receive and process client requests (see col. 2 lines 29-37); and

a constraint system to constrain operation of the application according to multiple different constraints, the constraint system comprising a hierarchy of constraint layers, with each constraint layer containing a set of one or more constraints that customize operation of the application wherein the constraint layers in the hierarchy have different respective priorities associated therewith (see col. 2 lines 29-37, col. 16 lines 48-61 and col. 19 lines 63-col. 20 lines 20, the operation of the application is customized according to the hierarchical structure of the directories);

wherein the constraint layers are organized within the hierarchy to provide a relation between a first constraint layer and a lower-priority second constraint layer such that the first constraint layer precludes behavior defined by the second constraint layer if the behavior of the second constraint layer conflicts with behavior defined by the first constraint layer, but the second constraint layer does not constrain the first constraint layer, wherein the relation between the first constraint layer and the second constraint layer holds even when the first constraint layer is applied prior to the second constraint

(see col. 19 lines 63-col. 20 lines 35 and fig. 13, the hierarchical structure of the directories customize the operation of each application according to the access level where the hierarchy is defined such as shown in fig. 24 A-B, first level :enterprise, second level :company B and company C etc.)

As to claim 2, Hasegawa teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles (see col. 23 lines 1-42).

As to claim 3, Hasegawa teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 23 lines 1-42).

As to claim 4, Hasegawa teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 23 lines 1-42).

As to claim 5, Hasegawa teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 23 lines 1-42 and fig. 24A-C).

As to claim 6, Hasegawa teaches a server system as recited in claim 1, wherein the hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences of an end user (see col. 23 lines 1-42 and fig. 24A-C).

As to claim 7, Hasegawa teaches a server system as recited in claim 1, where in the constraint layers are organized within the hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (see col. 23 lines 1-42).

As to claim 8, Hasegawa teaches a server system as recited in claim 1, further comprising a constraint resolver to resolve the constraint layers so that operation of the application is constrained by a sum of the constraints in the layers (see col. 23 lines 1-42 and fig. 24A-C).

As to claim 9, Hasegawa teaches a server system comprising:

one or more computers; and

a multi-layer application executing on the computers to handle client requests, the multi-layer application comprising:

a problem-solving logic layer to process the client requests according to an associated problem domain, the problem-solving logic layer containing one or more execution models to perform various sets of tasks when processing the client requests, the problem-solving logic layer producing replies to the client requests; a presentation

layer to structure the replies produced by the problem-solving logic layer in a manner that makes them presentable on various client devices (see col. 23 lines 1-42 and fig. 24A-C); and

a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that specify how the replies should be structured to customize the replies for specific sets of conditions (see col. 23 lines 1-42 and fig. 24A-C);

wherein the constraint layers are organized within the hierarchy to provide a relation between a first constraint layer and a lower-priority second constraint layer such that the first constraint layer precludes behavior defined by the second constraint layer if the behavior of the second constraint layer conflicts with behavior defined by the first constraint layer, but the second constraint layer does not constrain the first constraint layer, wherein the relation between the first constraint layer and the second constraint layer holds even when the first constraint layer is applied prior to the second constraint (see col. 19 lines 63-col. 20 lines 35 and fig. 13, the hierarchical structure of the directories customize the operation of each application according to the access level where the hierarchy is defined such as shown in fig. 24 A-B, first level :enterprise, second level :company B and company C etc.)

As to claim 10, Hasegawa teaches a server system as recited in claim 9, wherein constraint layers can be selectively added or removed from the constraint hierarchy

independently of other layers in the multi-layer application to produce different sets of constraints (see col. 23 lines 1-42).

As to claim 11, Hasegawa teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains legally mandated constraints that constrain the presentation layer to structure the replies to comply with certain legal principles (see col. 19 lines 63-col. 20 lines 42).

As to claim 12, Hasegawa teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains company-mandated constraints that constrain the presentation layer to structure the replies according to preferences of a company that operates the application (see col. 23 lines 1-42 and fig. 24A-C).

As to claim 13, Hasegawa teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains customer-oriented constraints that constrain the presentation layer to structure the replies according to preferences of customers (see col. 23 lines 1-42 and fig. 24A-C).

As to claim 14, Hasegawa teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains cultural constraints that constrain the presentation layer to structure the replies according to cultural aspects (see col. 21 lines 55-col. 22 lines 15).

As to claim 15, Hasegawa teaches a server system as recited in claim 9, wherein the constraint hierarchy comprises a constraint layer that contains end user constraints

that constrain the presentation layer to structure the replies according to preferences of end users (see col. 21 lines 55-col. 22 lines 15).

As to claim 16, Hasegawa teaches a server system as recited in claim 9, wherein the constraint layers can be removed or added to modify the set of constraints imposed on structuring the replies (see col. 21 lines 55-col. 22 lines 15).

As to claim 17, Hasegawa teaches a computer software architecture embodied on one or more computer-readable media, comprising:

a constraint hierarchy of multiple constraint layers, each constraint layer containing a set of one or more constraints that constrain operation of an application, the constraint layers being organized within the constraint hierarchy such that a first constraint layer limits a second constraint layer but the second constraint layer does not limit the first constraint layer (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C and col. 21 lines 55-col. 22 lines 20); and

a constraint resolver to resolve the constraint layers so that operation of the application is constrained by a set of the constraints in the constraint layers (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C and col. 21 lines 55-col. 22 lines 20).

As to claim 18, Hasegawa teaches a computer software architecture as recited in claim 17, wherein constraint layers are selectively added to or removed from the constraint hierarchy to form different sets of constraints on the operation of the application (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C and col. 21 lines 55-col. 22 lines 20).

As to claim 19, Hasegawa teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains legally mandated constraints to constrain operation of the application according to legal principles (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C and col. 21 lines 55-col. 22 lines 20).

As to claim 20, Hasegawa teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claim 21, Hasegawa teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains customer constraints to constrain operation of the application according to preferences of customers (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claim 22, Hasegawa teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains cultural constraints to constrain operation of the application according to cultural aspects (see col. 19 lines 62-col. 20 lines 42, and col. 21 lines 55-col. 22 lines 25).

As to claim 23, Hasegawa teaches a computer software architecture as recited in claim 17, wherein the constraint hierarchy comprises a constraint layer that contains end user constraints to constrain operation of the application according to preferences

of an end user (see col. 19 lines 62-col. 20 lines 42, and col. 21 lines 55-col. 22 lines 25).

As to claim 24, Hasegawa teaches a method comprising: storing a hierarchy of constraints, each constraint being configured to constrain operation of a server application; and evaluating an operation of the server application in view of the hierarchy of constraints to modify operation according to the constraints in the hierarchy (see col. 19 lines 62-col. 20 lines 42, and col. 21 lines 55-col. 22 lines 25).;

wherein the constraint layers are organized within the hierarchy to provide a relation between a first constraint layer and a lower-priority second constraint layer such that the first constraint layer precludes behavior defined by the second constraint layer if the behavior of the second constraint layer conflicts with behavior defined by the first constraint layer, but the second constraint layer does not constrain the first constraint layer, wherein the relation between the first constraint layer and the second constraint layer holds even when the first constraint layer is applied prior to the second constraint (see col. 19 lines 63-col. 20 lines 35 and fig. 13, the hierarchical structure of the directories customize the operation of each application according to the access level where the hierarchy is defined such as shown in fig. 24 A-B, first level :enterprise, second level :company B and company C etc.)

As to claim 25, Hasegawa teaches a method as recited in claim 24, further comprising adding or removing constraints from the hierarchy to alter operation of the

server application (see col. 19 lines 62-col. 20 lines 42, and col. 21 lines 55-col. 22 lines 25).

As to claim 26, Hasegawa teaches a method as recited in claim 24, wherein the hierarchy of constraints comprises constraints selected from a group of constraints comprising: legally mandated constraints to constrain operation of the application according to legal principles; company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application; customer constraints to constrain operation of the application according to preferences of customers; cultural constraints to constrain operation of the application according to cultural aspects; and end user constraints to constrain operation of the application according to preferences of an end user (see col. 8 lines 45-col. 9 lines 55 and col. 5 lines 45-col. 6 lines 58).

As to claims 27, Hasegawa teaches a method for operating a server application, comprising:

receiving requests from multiple clients; processing the requests to produce replies; structuring the reply to define how the reply will appear when presented at the client; and constraining said structuring according to a set of one or more constraints to customize appearance of the reply,

wherein the constraint layers are organized within the hierarchy to provide a relation between a first constraint layer and a lower-priority second constraint layer such

that the first constraint layer precludes behavior defined by the second constraint layer if the behavior of the second constraint layer conflicts with behavior defined by the first constraint layer, but the second constraint layer does not constrain the first constraint layer, wherein the relation between the first constraint layer and the second constraint layer holds even when the first constraint layer is applied prior to the second constraint (see col. 19 lines 63-col. 20 lines 35 and fig. 13, the hierarchical structure of the directories customize the operation of each application according to the access level where the hierarchy is defined such as shown in fig. 24 A-B, first level :enterprise, second level :company B and company C etc.)

the constraints comprising: legally mandated constraints to constrain appearance of the reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers;

cultural constraints to constrain appearance of the reply according to cultural aspects; and

end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claim 28, Hasegawa teaches a method as recited in claim 27, further comprising adding or removing constraints to change the set of constraints being applied to the structuring of the reply (see fig. 24A-C).

As to claim 29, Hasegawa teaches one or more computer-readable media comprising computer-executable instructions that, when executed, direct an application server to:

generate replies in response to client requests; and structure the replies according to a hierarchy of constraints to customize the replies, the constraints comprising a combination of one or more following constraints: legally mandated constraints to constrain appearance of a reply according to legal principles; company-mandated constraints to constrain appearance of the reply according to preferences of a company that operates the application; customer constraints to constrain appearance of the reply according to preferences of customers; cultural constraints to constrain appearance of the reply according to cultural aspects; and end user constraints to constrain appearance of the reply according to preferences of an end user (see col. 19-21);

wherein the constraint layers are organized within the hierarchy to provide a relation between a first constraint layer and a lower-priority second constraint layer such that the first constraint layer precludes behavior defined by the second constraint layer if the behavior of the second constraint layer conflicts with behavior defined by the first constraint layer, but the second constraint layer does not constrain the first constraint layer, wherein the relation between the first constraint layer and the second constraint layer holds even when the first constraint layer is applied prior to the second constraint (see col. 19 lines 63-col. 20 lines 35 and fig. 13, the hierarchical structure of the directories customize the operation of each application according to the access level

Art Unit: 2157

where the hierarchy is defined such as shown in fig. 24 A-B, first level :enterprise, second level :company B and company C etc.)

As to claim 30, Hasegawa teaches the server system as recited in claim 1, wherein the constraints are expressed as metadata (see col. 4 lines 10-45).

As to claim 31, Hasegawa teaches the server system as recited in claim 1, wherein the constraints of constraint layer can have the effect of overriding the constraints of another lower constraint layer (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claim 32, Hasegawa teaches the server system as recited in claim 1 wherein the constraints define presentation aspects of a reply sent to a customer (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claims 33-35, Hasegawa teaches the system of claims 1, 9 and 17 wherein each constraint layer represents a different source entity that customizes the application (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claims 36-38, Hasegawa teaches the server of claims 24, 27 and 29 wherein the hierarchy includes multiple constraint layers and wherein each constraint layer represents a different source entity that customizes the application (see col. 19 lines 62-col. 20 lines 42, fig. 24A-C).

As to claims 39-42, Hasegawa teaches the system of claims 1, 9, 17 and 24 where the hierarchy of constraints comprises each of:

legally mandated constraints to constrain operation of the application according to legal principles (see col. 5 lines 58-col. 6 lines 45, application customized according to security level of the user).

company-mandated constraints to constrain operation of the application according to preferences of a company that operates the application (see col. 8 lines 55-col. 9 lines 49, application customized according to corporate options).

customer constraints to constrain operation of the application according to preferences of customers (see fig. 24A-C and col. 21 lines 55-col. 22 lines 25).

cultural constraints to constrain operation of the application according to cultural aspects (see fig. 24A-C and col. 21 lines 55-col. 22 lines 25).

end user constraints to constrain operation of the application according to preferences of an end user (see fig. 24A-C and col. 21 lines 55-col. 22 lines 25).

As to claims 43 and 44, Hasegawa teaches the method and system of claims 27 and 29 wherein the constraints comprise each of the legally mandated constraints, the company mandated constraints, the customer constraints, the cultural constraints and the end user constraints (see fig. 24A-C and col. 21 lines 55-col. 22 lines 25).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

Art Unit: 2157

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 45-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hasegawa.

Hasegawa teaches a hierarchy of constraints where the constraints include legally mandated constraints, company mandated constraints, customer constraints, cultural constraints and end user constraints.

Hasegawa does not explicitly teach the constraints are arranged in the order of legally mandated constraints, company mandated constraints, customer constraints, cultural constraints and end user constraints. However it would have been obvious for one of the ordinary skill in the art at the time of the invention to modify Hasegawa by arranging the constraints in the order of legally mandated constraints, company mandated constraints, customer constraints, cultural constraints and end user constraints because doing so would customize the file in the same manner since changing the sequence is a design choice and not a patentably distinct feature. See MPEP 2144.04 Section IV © In re Burhans, 154 F.2d 690, 69 USPQ 330 (CCPA 1946).

Response to Arguments

5. Applicant's arguments have been fully considered but are moot in view of the new grounds of rejection

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hussein A. El-chanti whose telephone number is (571)272-3999. The examiner can normally be reached on Mon-Fri 8:30-5:00.

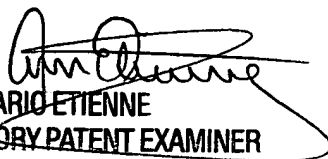
Art Unit: 2157

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571)272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Hussein El-chanti

March 28, 2007


ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100